

IN THE UNITED STATES DISTRICT COURT
NORTHERN DISTRICT OF TEXAS
DALLAS DIVISION

ROSEN TECHNOLOGIES LLC,	§	
	§	
Plaintiff,	§	
	§	
v.	§	Civil Action No. 3:22-CV-00732-K
	§	
LENNOX INTERNATIONAL INC.,	§	
	§	
Defendant.	§	

MEMORANDUM OPINION AND ORDER

Before the Court is Defendant’s Motion to Dismiss (the “Motion”) (Doc. No. 15). Rosen Technologies LLC filed Plaintiff’s Response to Defendant’s Motion to Dismiss (the “Response”) (Doc. No. 22), and Lennox International Inc. filed Defendant’s Reply in Support of Its Motion to Dismiss (the “Reply”) (Doc. No. 30). The Court has carefully considered the Motion, the Response, the Reply, the supporting exhibits, the applicable law, and the record. Because the Court finds that Plaintiff has stated a claim with respect to the eligibility of three of the asserted patents but failed to state a claim with respect to direct infringement of one of the asserted patents, the Court **GRANTS IN PART** and **DENIES IN PART** the Motion.

I. Overview of the Parties’ Arguments

Lennox International Inc. (“Defendant”) moves this Court to dismiss Counts I, II, IV, and V of the Amended Complaint (Doc. No. 13) pursuant to Federal Rule of Civil Procedure 12(b)(6). With respect to Counts I, II, and IV, Defendant requests

dismissal with prejudice on the grounds that U.S. Patent No. 6,619,555 (the “’555 Patent”), U.S. Patent No. 6,789,739 (the “’739 Patent”); and U.S. Patent No. 7,185,825 (the “’825 Patent”) are invalid under 35 U.S.C. § 101. Motion at 1. According to Defendant, each of these patents claims an ineligible abstract idea. *Id.* Moreover, says Defendant, because the claims of these patents do not recite anything other than well-understood, routine, and conventional activity, these patents fail to recite any inventive concept that might save them from ineligibility. *Id.* With respect to Count V, Defendant originally requested dismissal with prejudice on the ground that the Amended Complaint “fails to sufficiently plead direct infringement” of U.S. Patent No. 7,232,075 (the “’075 Patent”). Motion at 25.

In response to the arguments made with respect to Counts I, II, and IV, Rosen Technologies LLC (“Plaintiff”) argues that the ’555 Patent, ’739 Patent, and ’825 Patent are not directed to any abstract idea but instead “claim concrete inventions directed to solving specific technological problems with thermostat systems.” Response at 1. Moreover, Plaintiff argues, “even if the claims were directed to an abstract idea, they exhibit an inventive concept sufficient to render them subject matter eligible.” *Id.* Moreover, Plaintiff contends, with respect to Counts I, II, and IV “underlying issues of fact described in the Amended Complaint make granting the Motion inappropriate.” *Id.* In particular, Plaintiff argues “the Amended Complaint identifies specific shortcomings in the prior art and how the claimed inventions address those specific shortcomings,” creating factual disputes regarding “the state of the art at the time of

invention and what was or was not purely conventional or routine at that time.” *Id.* at 22 (citing the Amended Complaint at ¶¶ 18, 20, 22). Plaintiff also maintains that, with respect to Counts I, II, and IV, the Motion is premature because of “the need for claim construction.” *Id.* at 1; *see also id.* at 22. Finally, with respect to Count V, Plaintiff does not argue the Amended Complaint should not be dismissed, but instead argues the Court should dismiss Count V without prejudice and grant Plaintiff leave to amend the allegations in Count V to address any deficiencies with respect to the allegations of direct infringement of the ’075 Patent. *Id.* at 23.

In its reply in support of its motion, Defendant maintains its position that Counts I, II, and IV should be dismissed with prejudice. Reply at 10. It argues that “Plaintiff’s alleged inventive concepts are really the abstract ideas identified by Lennox”; that various hardware elements in the claims are well-known, generic, and even if they operate to limit the claims to a particular technical environment do not change the abstract nature of the claims; and that none of the alleged technical improvements are claimed in the relevant patents. Reply at 1. Defendant, however, indicates it ultimately agrees with Plaintiff that Count V should be dismissed with leave to amend. *Id.* at 10.

II. Legal Standard

Counts I-V of the Amended Complaint assert claims of patent infringement. To decide motions to dismiss in cases involving claims of patent infringement, courts apply the law of the relevant regional circuit, here the U.S. Court of Appeals for the Fifth Circuit. *See, e.g., Coop. Ent., Inc. v. Kollektive Tech., Inc.*, 50 F.4th 127, 130 (Fed. Cir.

2022). Patent eligibility, however, is governed by the law of the U.S. Court of Appeals for the Federal Circuit. *Id.*

In considering a Rule 12(b)(6) motion, a court must determine whether the plaintiff has sufficiently stated a claim upon which relief may be granted. Fed. R. Civ. P. 12(b)(6). A well-pleaded complaint must allege facts upon which the claims are based and not be a conclusory recitation of the elements of a cause of action. *Bell Atl. Corp. v. Twombly*, 550 U.S. 544, 555 (2007). A complaint must state sufficient facts such that the “claim has facial plausibility” and is not merely “possible.” *Ashcroft v. Iqbal*, 556 U.S. 662, 678 (2009). A plaintiff pleads a claim with facial plausibility when the “factual content . . . allows the court to draw the reasonable inference that the defendant is liable.” *Id.* The complaint must allege sufficient facts to “give the defendant fair notice” of the plaintiff’s claims against the defendant. *Twombly*, 550 U.S. at 555 (quoting *Conley v. Gibson*, 355 U.S. 41, 47 (1957)). The alleged facts must be facially plausible such that the facts nudge the plaintiff’s claims “across the line from conceivable to plausible.” *Id.* at 570.

The Court “accept[s] all well-pleaded facts as true and view[s] those facts in the light most favorable to the plaintiff.” *Stokes v. Gann*, 498 F.3d 483, 484 (5th Cir. 2007) (per curiam). The Court “do[es] not accept as true conclusory allegations, unwarranted factual inferences, or legal conclusions.” *Ferrer v. Chevron Corp.*, 484 F.3d 776, 780 (5th Cir. 2007) (quoting *Plotkin v. IP Axess Inc.*, 407 F.3d 690, 696 (5th Cir. 2005)). The Court must generally determine a motion to dismiss for failure to state a claim based

solely on the pleadings, including any attachments thereto. *Collins v. Morgan Stanley Dean Witter*, 224 F.3d 496, 498 (5th Cir. 2000). The Court, however, may permissibly refer to matters of public record in deciding a 12(b)(6) motion to dismiss. *Cinel v. Connick*, 15 F.3d 1338, 1343 n.6 (5th Cir. 1994). And, per Federal Rule of Evidence 201(b)(2), the Court may take judicial notice of an adjudicative fact when it “can be accurately and readily determined from sources whose accuracy cannot reasonably be disputed.”

Patent eligibility is a question of law, *Berkheimer v. HP, Inc.*, 881 F.3d 1360, 1365 (Fed. Cir. 2018), that can be determined at the rule 12(b)(6) stage, *Aatrix Software, Inc. v. Green Shades Software, Inc.*, 882 F.3d 1121, 1125 (Fed. Cir. 2018). Patent eligibility, however, may depend on underlying issues of fact. *Berkheimer*, 881 F.3d at 1365; *Aatrix*, 882 F.3d at 1125. As a result, patent eligibility may be determined at the 12(b)(6) stage “only when there are no factual allegations that, taken as true, prevent resolving the eligibility question as a question of law.” *Aatrix*, 882 F.3d at 1125. For example, “plausible factual allegations may preclude dismissing a case under § 101 where, for example, ‘nothing on th[e] record . . . refutes those allegations as a matter of law or justifies dismissal under Rule 12(b)(6).’” *FairWarning IP, LLC v. Iatric Sys., Inc.*, 839 F.3d 1089, 1097 (Fed. Cir. 2016) (quoting *BASCOM Glob. Internet Servs., Inc. v. AT&T Mobility LLC*, 827 F.3d 1341, 1352 (Fed. Cir. 2016)). Moreover, if a claim includes “alleged inventive concepts which the specification touts as specific improvements” in a field compared to the prior art, and the amended complaint “plausibly alleges these

[improvements are] inventive concepts,” a Rule 12(b)(6) motion should be denied. *Coop. Ent., Inc.*, 50 F.4th at 131.

Section 101 of Title 35 explains that “[w]hoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefore, subject to the conditions and requirements of this title.” Even when claims identify a process, machine, manufacture, or composition of matter, the Supreme Court requires the lower courts to apply a two-step framework to determine patent eligibility. *Alice Corp. v. CLS Bank Int’l*, 573 U.S. 208, 217 (2014). First, courts must determine whether the patent claims at issue are “directed to” a “patent-ineligible concept,” such as an abstract idea. *Id.* If so, second, then courts must “consider the elements of each claim both individually and ‘as an ordered combination’ to determine whether the additional elements ‘transform the nature of the claim’ into a patent-eligible application” of the abstract idea. *Id.* This second part of the analysis is a search for an “inventive concept”—an element or combination of elements that is sufficient to ensure that the patent in practice amounts to significantly more than a patent on the abstract idea itself. *Id.* at 217-18.

The “abstract idea” category of patent-ineligible concepts embodies the rule that an idea of itself is not patentable. *Id.* at 218. As the Supreme Court explained long ago, a “principle, in the abstract, is a fundamental truth; an original cause; a motive; these cannot be patented, as no one can claim in either of them an exclusive right.” *Le Roy v.*

Tatham, 55 U.S. 156, 159 (1853). More recently, however, the Supreme Court has included mathematical algorithms and “fundamental economic practice[s] long prevalent in our system of commerce” as “abstract ideas.” *Alice*, 573 U.S. at 218-221.

The Federal Circuit has indicated that, “[i]n cases involving software innovations, [the step-one] inquiry often turns on whether the claims focus on specific asserted improvements in computer capabilities or instead on a process or system that qualifies [as] an abstract idea for which computers are invoked merely as a tool.” *Int’l Bus. Mach. Corp. v. Zillow Grp., Inc.*, 50 F.4th 1371, 1377 (Fed. Cir. 2022) (quoting *TecSec, Inc. v. Adobe Inc.*, 978 F.3d 1278, 1293 (Fed. Cir. 2020)). Furthermore, it has explained that “improving a user’s experience while using a computer application is not, without more, sufficient to render the claims” patent-eligible at step one. *Id.* (quoting *Customedia Techs., LLC v. DISH Network Corp.*, 951 F.3d 1359, 1365 (Fed. Cir. 2020)).

Transformation of a patent-ineligible concept into a patent-eligible application requires more than simply stating the abstract idea while adding the words “apply it.” *Alice*, 573 U.S. at 221. Furthermore, according to the Supreme Court’s most recent cases, “[s]imply appending conventional steps, specified at a high level of generality,” is not “enough” to supply an “inventive concept.” *Id.* at 222 (citing and quoting *Mayo Collaborative Servs. v. Prometheus Labs., Inc.*, 566 U.S. 66, 82 (2012)). The introduction of a computer, moreover, does not alter the analysis if the computer “simply implement[s] a mathematical principle on a physical machine, namely a computer.” *Id.* (citing and quoting *Mayo*, 566 U.S. at 84). Nor is the prohibition on patenting an

abstract idea circumvented by limiting the use of the idea to a particular technological environment, such as implementation via computers. *Id.* (citing and quoting *Bilski v. Kappos*, 561 U.S. 593, 610-11 (2010)). A computer-implemented process is eligible, however, if it solves a technological problem in conventional industry practice or otherwise improves an existing technological process. *Id.* at 223 (quoting and citing *Diamond v. Diehr*, 450 U.S. 175, 177 (1981)). An “inventive concept,” in the words of the most recent Supreme Court opinions on point, includes an “inventive application” of a mathematical formula or other abstract idea. *Id.*

Notably, in the eligibility context, “[w]hether something is well-understood, routine, and conventional to a skilled artisan at the time of the patent is a factual determination.” *Berkheimer*, 881 F.3d at 1369. And “[a]ny fact, such as this one, that is pertinent to the invalidity conclusion must be proven by clear and convincing evidence.” *Id.* at 1368. Mere disclosure of something in a piece of prior art “does not mean it was well-understood, routine, and conventional.” *Id.* at 1369. By contrast, disclosure of “improvements in the specification, to the extent they are captured in the claims, create a factual dispute regarding whether the invention describes well-understood, routine, and conventional activities.” *Id.* Furthermore, allegations in complaints, which must be taken as true, may impact the eligibility analysis. *Aatrix*, 882 F.3d at 1126. These allegations may create factual disputes underlying the eligibility analysis, such as whether claims include any inventive concept. *Id.* That is, “patentees who adequately

allege their claims contain inventive concepts survive a § 101 eligibility analysis under Rule 12(b)(6).” *Id.* at 1126-27.

Finally, patent eligibility is determined on a claim-by-claim basis. The Federal Circuit, moreover, has recently indicated it is error to dismiss a complaint at the 12(b)(6) stage without analyzing separately claims not directed to the same subject matter. *See Weisner v. Google LLC*, 51 F.4th 1073, 1084 (Fed. Cir. 2022) (“At step one, the district court erred by failing to separately analyze these patents. Although the specifications in all four patents are the same, the claims . . . are not directed to the same subject matter . . .”).

III. Analysis

A. Eligibility

The Court first addresses the allegations that the Amended Complaint fails to state a plausible claim with respect to three patents on the basis of lack of eligibility.

1. Need for Claim Construction

As this Court has previously recognized, sometimes it is not possible to decide subject matter eligibility on a Rule 12(b)(6) motion because “[t]he claims at issue may require construction prior to making an invalidity determination.” *Blue Yonder Grp., Inc. v. Kinaxis Inc.*, No. 3:20-CV-03636-K, 2021 WL 2698437, at *2 (N.D. Tex. May 17, 2021). Plaintiff argues, as in *Blue Yonder*, “the claims at issue here require claim construction before the Court can rule on the assertion of invalidity under 35 U.S.C. § 101.” Response at 22.

Here, however, Plaintiff has not demonstrated that any claim construction is necessary in this case to resolve any dispute identified by the parties regarding the meaning of any claim term. In the absence of any proposed construction of any terms—let alone any that would change the eligibility analysis—it is appropriate for a district court to address the eligibility of asserted patents at the motion to dismiss stage in advance of any claim construction. *See Cleveland Clinic Found. v. True Health Diagnostics LLC*, 859 F.3d 1352, 1360 (Fed. Cir. 2017). While it is true that the claims of the asserted patents are lengthy with numerous limitations and elements, Plaintiff has not identified any particular term or phrase of the art in need of construction, proposed any claim construction of any term or phrase, or identified why any proposed construction would impact the dispute between the parties, including the abstract idea inquiry. Without any such showing, there is no apparent need for any claim construction before resolving the parties' disputes.

2. The '555 Patent

Defendant has not met its burden of demonstrating that the Amended Complaint fails to state a plausible claim with respect to the '555 Patent on the basis of lack of eligibility.

Claim 1 of the '555 Patent recites:

A thermostat system for controlling space conditioning equipment comprising:

A) a temperature sensor for providing an electrical signal indicative of the temperature of a conditioned space in which the temperature sensor is situated;

B) a liquid crystal display for selectively displaying an alphanumeric message;

C) a processor, said processor including:

1) a central processing unit;

2) a real time clock;

3) a memory coupled to said central processing unit for storing program and data information, said data including a table storing key terms on a predetermined subject; and

4) an input/output unit including:

a) a sensor input coupled to said temperature sensor for receiving said electrical signal therefrom;

b) a control output coupled to the space conditioning equipment for issuing control signals thereto; and

c) a communications interface adapted to establish bi-directional communications between said processor and a remote correspondent; and

D) a program stored in said memory for causing said central processing unit to selectively:

1) direct said input/output unit to establish communications with a first remote correspondent which is a source of current information through said communications interface;

2) read the current information from said external source;

3) parse the current information against said key terms stored in said memory;

4) if a match is found during step D)3), searching the current information for at least one value associated with the said matched key term; and

5) if said at least one value associated with the matched key term is found during step D)4), displaying an alphanumeric message on said liquid crystal display, said alphanumeric message including:

a) a first message component stored in said memory and representative of the connotation of said matched key term; and

b) a second message component representative of said at least one value associated with the matched key term found during step D)4).

As highlighted by Plaintiff, Claim 9 adds the requirements of an “alarm condition determination means adapted to detect an alarm condition included in said current information” and an “alarm condition alerting means to transmit an alarm message through said communications interface to a predetermined second remote correspondent.” As also highlighted by Plaintiff, Claim 18 includes the requirement of “means coupling said communications interface and said first remote correspondent.”

Drawing all inferences in favor of Plaintiff, while Claims 1 and 18 of the ’555 Patent may recite ineligible subject matter, Claim 9 of the ’555 Patent recites eligible subject matter. In particular, Claim 9 is directed to the idea of using current information received from a remote device to improve the functioning of a thermostat system. Even if this is an abstract idea, Claim 9 includes an inventive concept.

As a preliminary matter, it would be error for this Court not to analyze Claim 9 separately given that it is not directed to the same subject matter as Claim 1. *See Weisner*, 51 F.4th at 1084.

At *Alice* step one, it is a close question whether Claim 9 is directed to an abstract idea. In this regard, the Federal Circuit’s recent decision in *Weisner* is particularly instructive. In that case, the relevant claims were directed to creating and using travel histories to improve computerized search results, *id.*, whereas here Claim 9 is directed to using current information received from a remote device to improve the functioning of a thermostat system. The specification of the ’555 Patent provides an embodiment of what is described in Claim 9. The summary of the invention describes how “the

thermostat system can use current weather information received from the first remote correspondent to determine and act if the received information is such that a second remote correspondent interfacing with a remotely controllable thermostat system should be contacted, and send directive information suitably change the temperature (or other parameter) set point at the second remote site.” ’555 Patent at 2:32-39. In this way, the specification emphasizes using information to improve the functioning of the thermostat system (as in Claim 9), which is a distinct concept from the mere accumulation of the information (as in Claim 1). *See Weisner*, 51 F.4th at 1085 (describing how the specification at issue in that case “supports th[e] emphasis on using location histories in computerized searching as a distinct concept from mere accumulation of location histories”).

Regardless, as in *Weisner*, while it is a close question whether Claim 9 is directed to an abstract idea, even if it is, Claim 9 includes an inventive concept. As a result, Claim 9 passes muster at *Alice* step two.

Plaintiff has plausibly alleged that Claim 9 recites a specific implementation that purports to solve a problem in the field of thermostat systems. *See id.* (finding the relevant “claims recite a specific implementation of the abstract idea that purports to solve a problem unique to the Internet”). While Claim 9, as Claim 1, includes generic components, Claim 9 recites a particular way of using current information received from a remote device to improve the functioning of the thermostat system. In particular, Claim 9 describes a thermostat system detecting an alarm condition using current

information received from a first remote correspondent and, in response, transmitting an alarm message to a second remote correspondent. This is more than just obtaining and storing collected information. It is a specific improvement to a thermostat system, where one device collects information, identifies an alarm condition, and notifies another device in the thermostat system of the alarm. In this way, Claim 9 “captures an inventive concept in the form of a specific technique for using [information] to improve” a thermostat system. *Id.* at 1086 (finding the relevant claim “plausibly captures an inventive concept in the form of a specific technique for using physical location history data to improve computerized search results”).

In effect, Claim 9 describes solving a technological problem in conventional industry practice or otherwise improving an existing technological process. *Alice*, 573 U.S. at 223. The Amended Complaint, quoting the ’555 Patent, alludes to this improvement where it alleges that, in the prior art, some thermostat systems “limit, or even make no provision for, user programming,” such as “thermostats distributed throughout a large commercial establishment.” Amended Complaint at ¶ 28 (quoting ’555 Patent at 1:48-64). Furthermore, the Amended Complaint, again quoting the ’555 Patent, also alludes to this improvement where it alleges that, “[t]o address one or more shortcomings of these existing thermostats, the ’555 Patent discloses, *inter alia*, a ‘thermostat system incorporating a communication interface for receiving . . . diverse information from a remote correspondent.’” *Id.* at ¶ 29 (citing ’555 Patent at 1:8-10).

Other portions of the '555 Patent, which was attached to the Amended Complaint, are more specific with respect to the claimed solution and its benefits. The summary of the invention describes how “the thermostat system can use current weather information received from the first remote correspondent to determine and act if the received information is such that a second remote correspondent interfacing with a remotely controllable thermostat system should be contacted, and send directive information suitably change the temperature (or other parameter) set point at the second remote site.” '555 Patent at 2:32-39. As for the benefits of this approach, the “description of preferred embodiment(s)” describes how the “processor . . . may determine, in response to this new weather information supplied by the first remote correspondent . . . , that the heat should be turned on (or the set point raised) at the site of the second remote correspondent . . . in order to protect water pipes against freezing, warm the conditioned space controlled by the second correspondent in anticipation of its upcoming occupation, etc.” *Id.* at 6:37-45. In other words, the specific claimed implementation is alleged to solve a problem particular to thermostat systems. *See Weisner*, 51 F.4th at 1086 (“This specific implementation is also alleged to solve a problem particular to the Internet.”). Thus, even if each element of the hardware described in Claim 9 is conventional, as Defendant argues, that does not mean Claim 9 is ineligible. Claim 9 describes a useful improvement to a thermostat system regardless of whether the system includes only standard equipment. *See Coop. Ent., Inc.*, 50 F.4th at 135 (“[U]seful improvements to computer networks are patentable

regardless of whether the network is comprised of standard computing equipment.”). Moreover, at this stage it is insufficient for Defendant to argue the Amended Complaint’s allegation that the ’555 Patent addresses shortcomings in existing thermostats “lacks merit.” Motion at 15. At this stage, the Court must “accept all well-pleaded facts as true and view those facts in the light most favorable to the plaintiff.” *Stokes*, 498 F.3d at 484.

The Court concludes that, with respect to Claim 9 of the ’555 Patent, Defendant has failed to prove by clear and convincing evidence that the Amended Complaint and the ’555 Patent recite ineligible subject matter. Rather, the Amended Complaint and the ’555 Patent do plausibly recite a claimed invention that, even if it is an abstract idea, includes an inventive concept that adds significantly more to the mere idea of collecting, storing, and displaying information. The inventive concept is supported by allegations in the Amended Complaint and the ’555 Patent, which must be taken as true at the pleadings stage.

3. The ’739 Patent

Defendant has also not met its burden of demonstrating that the Amended Complaint fails to state a plausible claim with respect to the ’739 Patent on the basis of lack of eligibility.

Claim 1 of the ’739 Patent recites:

A location response system with an environmental controller located at a single physical location adapted to be an integral part of a system of environmental sensing or control for a local and substantially enclosed space comprising:

- A) a physical location of the environmental controller stored as location data in storage means in the controller;
- B) transmitter means connected to the controller adapted to transmit location data to a remote device physically remote from the controller, so that a location response is induced at the remote device; and
- C) location response is storage of the location data at the remote device and correlation of the physical location to location response data stored at or available to the remote device or created by processing of location data at the remote device, whereafter location response data is transmitted from the remote device to the controller.

As highlighted by Plaintiff, Claim 4 adds the requirement that

the controller comprises control means which acts on a response of location data for thermostatic functions including structure needed to turn HVAC functions on or off or change operation thereof, impose control setpoints or other control parameters, turn lighting on or off, or those functions accomplished locally or wirelessly by a system of thermostatic control among distributed components.

As also highlighted by Plaintiff, Claim 10 adds a requirement that

the controller comprises control means for thermostatic functions including structure needed to turn HVAC functions on or off or change operation thereof, impose control setpoints or other control parameters, turn lighting on or off, sense and respond to environmental gases or smoke, or those functions accomplished locally or wirelessly by a system of thermostatic control among distributed components, and the storage means comprise control data for operation of control means and comparison means for comparison of control data to location response data and change of at least some control data in response to that comparison.

Drawing all inferences in favor of Plaintiff, while Claim 1 of the '739 Patent may recite ineligible subject matter, Claims 4 and 10 of the '739 Patent recite eligible subject

matter. Claims 4 and 10 are each directed to the idea of using physical location data and location response data to improve the functioning of a system for environmental sensing or control. This is not an abstract idea. Even if this were, however, each of Claims 4 and 10 includes an inventive concept.

As a preliminary matter, as with the '555 Patent, it would be error for this Court not to analyze Claims 4 and 10 of the '739 Patent separately given that they are not directed to the same subject matter as Claim 1 of the '739 Patent. *See Weisner*, 51 F.4th at 1084.

At *Alice* Step one, neither Claim 4 nor Claim 10 is directed to an abstract idea. Claims 4 and 10 are each directed to using physical location data to obtain location response data from a remote device and, critically, using the location response data to improve the functioning of a system for environmental sensing or control. In this latter regard, Claim 4 includes “control means which acts on a response of location data for thermostatic functions,” while Claim 10 includes “control means for thermostatic functions” and “control data for operation of control means and comparison means for comparison of control data to location response data and change of at least some control data in response to that comparison.” Thus, these claims describe acting upon “a response of location data” or “location response data” to operate “thermostatic functions.” In turn, Claim 4 describes these functions as “turn[ing] HVAC functions on or off or chang[ing] operation thereof, impos[ing] control setpoints or other control parameters, turn[ing] lighting on or off, or those functions accomplished locally or

wirelessly by a system of thermostatic control among distributed components.” Claim 10 describes these same functions plus “sens[ing] and respond[ing] to environmental gases or smoke.” Corresponding to Claims 4 and 10, the specification of the ’739 Patent describes how “control means . . . include the structure needed to turn HVAC functions on or off or change operation thereof, impose control setpoints or other control parameters, turn lighting on or off, sense and respond to environmental gases or smoke, or other of several functions accomplished locally or wirelessly by present day programmable thermostats and their distributed components.” ’739 Patent at 6:62-7:2. These are not abstract ideas—they are certainly not mathematical algorithms or fundamental economic practices—but specific asserted improvements in the functioning of a system for environmental sensing or control. *Int’l Bus. Mach. Corp.*, 50 F.4th at 1377. Nor are these functions the mere “[a]utomation or digitization of a conventional method of organizing human activity.” *Weisner*, 51 F.4th at 1083. As described by the ’555 Patent, they are thermostatic functions.

Regardless, at *Alice* step two, even if Claims 4 and 10 were directed to an abstract idea, each of Claims 4 and 10 includes an inventive concept.

Plaintiff has plausibly alleged that Claims 4 and 10 each recites a specific implementation that purports to solve a problem in the field of environmental sensing or control. *See id.* at 1085 (finding the relevant “claims recite a specific implementation of the abstract idea that purports to solve a problem unique to the Internet”). While Claims 4 and 10, as Claim 1, include generic components, Claims 4 and 10 each recites

a particular way of using physical location data to obtain location response data from a remote device to improve the functioning of the system for environmental sensing or control. Claims 4 and 10 each describes acting upon “a response of location data” or “location response data” to operate “thermostatic functions.” This is more than just obtaining and storing collected information. It is a specific improvement to a system for environmental sensing or control, where one device collects physical location data, uses the physical location data to obtain location response data from another device, and, critically, uses the location response data to, for example, impose control setpoints or turn lighting on or off. In this way, each of Claims 4 and 10 “captures an inventive concept in the form of a specific technique for using [information] to improve” a system for environmental sensing or control. *Id.* at 1086 (finding the relevant claim “plausibly captures an inventive concept in the form of a specific technique for using physical location history data to improve computerized search results”).

In effect, Claims 4 and 10 each describe solving a technological problem in conventional industry practice or otherwise improving an existing technological process. *Alice*, 573 U.S. at 223. The Amended Complaint, quoting the ’739 Patent, alludes to this improvement where it alleges that, “[t]o address one or more shortcomings of . . . existing thermostats, the ’739 Patent discloses, *inter alia*, a ‘thermostat system incorporating a communication interface for receiving . . . diverse information from a remote correspondent.’” Amended Complaint at ¶ 35 (citing ’739 Patent at 1:9-11).

Other portions of the '739 Patent, which was attached to the Amended Complaint, are more specific with respect to the claimed solution and its benefits. The “description of preferred embodiment(s)” describes how “control means . . . include the structure needed to turn HVAC functions on or off or change operation thereof, impose control setpoints or other control parameters, turn lighting on or off, sense and respond to environmental gases or smoke, or other of several functions accomplished locally or wirelessly by present day programmable thermostats and their distributed components.” '739 Patent at 6:62-7:2. This description corresponds to Claims 4 and 10. This portion of the '739 Patent goes on to provide a specific example of use of the claimed invention, where location data of a thermostat is transmitted to a weather website, which associates it with local weather data for the thermostat location and transmits the local weather data to the thermostat, and where the thermostat “uses [the local weather data] within control means.” *Id.* at 7:19-32. The '739 Patent explains the claimed invention is able to provide this functionality because “location data are for physical location of an environmental controller, not a specific network address such as an IP address which does not have geographical relevance.” *Id.* at 7:32-35. This, moreover, is an advance over the prior art, according to the '739 Patent, because, “[t]o date, the prior art contains no environmental controllers that have geographic information, such as location data in the form of a zip or telephone number, stored in them.” *Id.* at 7:58-61. In other words, the specific claimed implementation is alleged to solve a problem particular to systems for environmental sensing or control. *See Weisner,*

51 F.4th at 1086 (“This specific implementation is also alleged to solve a problem particular to the Internet.”). Thus, even if each element of the hardware described in Claims 4 and 10 is conventional, as Defendant argues, that does not mean Claims 4 and 10 are ineligible. Claims 4 and 10 each describes a useful improvement to a system for environmental sensing or control regardless of whether the system includes only standard equipment. *See Coop. Ent., Inc.*, 50 F.4th at 135 (“[U]seful improvements to computer networks are patentable regardless of whether the network is comprised of standard computing equipment.”).

The Court concludes that, with respect to Claims 4 and 10 of the ’739 Patent, Defendant has failed to prove by clear and convincing evidence that the Amended Complaint and the ’739 Patent recite ineligible subject matter. Rather, the Amended Complaint and the ’739 Patent do plausibly recite a claimed invention that, even if it is an abstract idea, includes an inventive concept that adds significantly more to the mere idea of storage and transmission of physical location data and location response data. The inventive concept is supported by allegations in the Amended Complaint and the ’739 Patent, which must be taken as true at the pleadings stage.

4. The ’825 Patent

Defendant has also not met its burden of demonstrating that the Amended Complaint fails to state a plausible claim with respect to the ’825 Patent on the basis of lack of eligibility.

Claim 1 of the ’825 Patent recites:

A programmable thermostat for controlling space conditioning equipment comprising:

- A) means coupling suitable power for energizing said thermostat from said space conditioning equipment to said thermostat;
- B) an interactive interface for a user to enter programming information into said thermostat;
- C) a temperature sensor for providing an electrical signal indicative of the temperature of a conditioned space in which the temperature sensor is situated;
- D) a processor, said processor including:
 - 1) a central processing unit;
 - 2) a first memory coupled to said central processing unit for storing program and data information; and
 - 3) an input/output unit including:
 - a) a sensor input coupled to said temperature sensor for receiving said electrical signal therefrom; and
 - b) a control output coupled to the space conditioning equipment for issuing control signals thereto;
 - 4) a real time clock;
 - 5) a non-volatile random access memory; and
 - 6) a control program stored in said first memory directing:
 - a) said real time clock to periodically read its current time and date information into said non-volatile memory; and
 - b) upon restart after a loss and then return of power from said space conditioning equipment, read the time and date information stored in said non-volatile memory into said real time clock.

Drawing all inferences in favor of Plaintiff, Claim 1 of the '825 Patent recites eligible subject matter. Claim 1 is directed to the idea of a programmable thermostat periodically reading current time and date information into non-volatile memory so that upon restart after a loss and then return of power the time and date information may be used by the thermostat's clock. This is not an abstract idea. Even if were, however, Claim 1 includes an inventive concept.

At *Alice* step one, Claim 1 is not directed to an abstract idea but instead to a programmable thermostat periodically reading current time and date information into non-volatile memory so that upon restart after a loss and then return of power the time and date information may be used by the thermostat's clock. Specifically, Claim 1 includes a processor with a control program directing a "real time clock to periodically read its current time and date information into . . . non-volatile memory" and "upon restart after a loss and then return of power . . . read the time and date information stored in [the] non-volatile memory into [the] real time clock." Thus, the claim describes periodically storing time and date information so that, after a power failure, a programmable thermostat may utilize this time and date information. Critically, Claim 1 does not simply describe (repeatedly) storing information. Rather, Claim 1 describes what the claimed system does with the stored information: the real time clock utilizes this information after a power failure. This is not an abstract idea. It is not a mathematical algorithm. It is not a fundamental economic practice. It is a specific asserted improvement in the functioning of a thermostat. *Int'l Bus. Mach. Corp.*, 50 F.4th at 1377. Nor is this function the mere "[a]utomation or digitization of a conventional method of organizing human activity." *Weisner*, 51 F.4th at 1083. In fact, the claimed invention provides the benefit of resetting the clock of a programmable thermostat *when a person is not able to do so*, such as when the person is on vacation. '825 Patent at 2:51-59 (describing how problems with prior thermostats include a thermostat entering a programming mode using the wrong time and date "such that,

for example, in the vacation mode, the system will not correctly anticipate the return of occupants and thus will not necessarily earlier resume normal operation to render the space comfortable by the time the occupants return”).

To be clear, Claim 1 does not describe a computer that is invoked merely as a tool to obtain and store information. That is, Claim 1 does not describe merely collecting and storing information but instead using that information to improve the operation of a programmable thermostat. *Cf. Int’l Bus. Mach. Corp.*, 50 F.4th at 1378.

Regardless, at *Alice* step two, even if Claim 1 were directed to an abstract idea, Claim 1 includes an inventive concept.

Plaintiff has plausibly alleged that Claim 1 recites a specific implementation that purports to solve a problem in the field of programmable thermostats. *See Weisner*, 51 F.4th at 1085 (finding the relevant “claims recite a specific implementation of the abstract idea that purports to solve a problem unique to the Internet”). While Claim 1 includes generic components, it recites a particular way of using current time and date information to improve the functioning of a programmable thermostat. Claim 1 describes periodically reading current time and date information into non-volatile memory so that upon restart after a loss and then return of power the time and date information may be used by the thermostat’s clock. This is more than just obtaining and storing information. It is a specific improvement to a programmable thermostat, where the repeated storing of the current time and date information into non-volatile memory, critically, allows the thermostat’s clock to use this stored information after a

power outage. In this way, Claim 1 “captures an inventive concept in the form of a specific technique for using [information] to improve” a programmable thermostat. *Id.* at 1086 (finding the relevant claim “plausibly captures an inventive concept in the form of a specific technique for using physical location history data to improve computerized search results”).

In effect, Claim 1 describes solving a technological problem in conventional industry practice or otherwise improving an existing technological process. *Alice*, 573 U.S. at 223. The Amended Complaint, quoting the ’825 Patent, identifies an alleged advantage of the claimed invention. In particular, the Amended Complaint alleges that, in the prior art, “either a battery or very high capacity capacitor (‘super cap’) provides backup power to ‘ride out’ equipment failure (‘outage’) until power is restored.” Amended Complaint at ¶ 46 (quoting ’825 Patent at 2:18-22). But, the Amended Complaint continues, “[b]atteries must be changed at intervals to ensure that the thermostat will continue to hold its time and setting throughout an outage.” *Id.* (quoting ’825 Patent at 2:22-25). The Amended Complaint then alleges that, “[t]o address one or more shortcomings of these existing thermostats, the ’825 Patent discloses, *inter alia*, a ‘fail safe real time clock in a programmable clock, particularly a thermostat incorporating a vacation mode of operation.’” *Id.* at ¶ 47 (citing ’825 Patent at 2:56-59). Implicitly, the Amended Complaint asserts the invention of Claim 1 eliminates the problem of expired batteries and/or the necessity of replacing batteries to ensure programmable thermostats work as intended.

Other portions of the '825 Patent, which was attached to the Amended Complaint, are more specific and explicit with respect to the claimed solution and its benefits. First, consider the detailed explanation of alleged problems associated with the prior art. The background of the invention describes how, “[m]ost commonly, power to a programmable thermostat is supplied from the controlled space conditioning equipment, and either a battery or a very high capacity capacitor (‘supercap’) provides backup power to ‘ride out’ equipment power failure (‘outage’) until power is restored.” ’825 Patent at 2:10-22. The ’825 Patent describes problems with these backup power sources, including how “these are not fail safe expedients” because the “maintenance task” of replacing batteries is “often ignored or followed sporadically” and supercaps “are susceptible over time to developing leakage which greatly diminish their charge-storing capacity.” *Id.* at 2:22-34. “In either instance,” the background explains, “the real time clock loses its current time and date values.” *Id.* at 2:35-36. This is problematic, the ’825 Patent explains, because, “particularly if the outage occurs while the thermostat is operating in the vacation mode,” there can be “drastic consequences and, at best, . . . a significant inconvenience.” *Id.* at 2:36-39. The problems include a thermostat entering a programming mode using the wrong time and date “such that, for example, in the vacation mode, the system will not correctly anticipate the return of occupants and thus will not necessarily earlier resume normal operation to render the space comfortable by the time the occupants return.” *Id.* at 2:51-59.

Next, consider the detailed explanation of alleged advantages associated with the claimed invention. Corresponding to the invention of Claim 1, the specification describes “a more specific object . . . to provide a thermostat having a real time clock and a non-volatile random access memory in which the current time and date are periodically read from the real time clock into the random access memory such that, in the event of an outage, the last time and date previously stored is recovered from the non-volatile random access memory upon the restoration of power to reset the real time clock in anticipation of resuming operation in the mode running at the time of the outage.” *Id.* at 3:1-9. The summary of the invention then describes an advantage to this approach, namely it “provides an acceptable reset of the clock which will only be off current time by an amount represented by the period between the last update and the return of power.” *Id.* at 3:25-29. But that’s not all. Moreover, “the need for backup power, such as a battery or a supercap, is eliminated.” *Id.* at 3:30-31.

In other words, the specific claimed implementation is alleged to solve problems particular to programmable thermostats. *See Weisner*, 51 F.4th at 1086 (“This specific implementation is also alleged to solve a problem particular to the Internet.”). Thus, even if each element of the hardware described in Claim 1 is conventional, as Defendant argues, that does not mean Claim 1 is ineligible. Claim 1 describes a useful improvement to a programmable thermostat regardless of whether the thermostat includes only standard equipment. *See Coop. Ent., Inc.*, 50 F.4th at 135 (“[U]seful

improvements to computer networks are patentable regardless of whether the network is comprised of standard computing equipment.”).

While Defendant argues that Claim 1 does not recite these advantages, such as resuming programmed operations, maintaining previously set temperature parameters, or eliminating the need for a backup power source, the relevant question is not whether Claim 1 recites these advantages but, instead, whether the claim includes “alleged inventive concepts *which the specification touts as specific improvements*” in a field compared to the prior art, and whether the *amended complaint* “plausibly alleges these [improvements are] inventive concepts.” *Coop. Ent., Inc.*, 50 F.4th at 131 (emphasis added). In other words, the benefits of the claimed invention compared to the prior art need not be expressly recited in the claim so long as the claim “captures” the improvement. *Berkheimer*, 881 F.3d at 1369 (indicating that disclosure of “improvements in the specification, to the extent they are captured in the claims, create[s] a factual dispute regarding whether the invention describes well-understood, routine, and conventional activities”).

Furthermore, to the extent Defendant argues that the claimed invention “provides no greater technical advantage with respect to the avoidance of a ‘source of backup power’ than a conventional thermostat without a ‘source of backup power’ in which a human manually resets the clock with the ‘time and date information’ after a power outage,” Reply at 2, this also misses the point. The Federal Circuit has held that employment of a computer “to perform a distinct process to automate a task previously

performed by humans” is eligible, for example, if the claimed process incorporates “rules . . . that improve the existing technological process by allowing the automation of further tasks” such that “the claimed computer-automated process and the prior method” are not “carried out in the same way.” *McRO, Inc. v. Bandai Namco Games Am. Inc.*, 837 F.3d 1299, 1314 (Fed. Cir. 2016). Such is the case here. Notably, Defendant cites no evidence that in the prior art humans periodically instructed programmable thermostats to store current time and date information in anticipation of upcoming power outages so that, after the power outages, humans would not have to reset the current time and date information. Even if it could, moreover, nothing in the record refutes the patent’s allegations as a matter of law, *see FairWarning IP, LLC*, 839 F.3d at 1097, by establishing by clear and convincing evidence that the patent’s approach was well-understood, routine, and conventional, *see Berkheimer*, 881 F.3d at 1369.

The Court concludes that, with respect to Claim 1 of the ’825 Patent, Defendant has failed to prove by clear and convincing evidence that the Amended Complaint and the ’825 Patent recite ineligible subject matter. Rather, the Amended Complaint and the ’825 Patent do plausibly recite a claimed invention that, even if it is an abstract idea, includes an inventive concept that adds significantly more to the mere idea of storage of information. The inventive concept is supported by allegations in the Amended Complaint and the ’825 Patent, which must be taken as true at the pleadings stage.

B. Direct Infringement of the '075 Patent

The Court next addresses the allegation that the Amended Complaint fails to state a plausible claim of direct infringement with respect to the '075 Patent. In response to this allegation, Plaintiff argues the Court should dismiss Count V without prejudice and grant Plaintiff leave to amend the allegations in Count V to address any deficiencies. Response at 23. Moreover, Defendant ultimately agrees with Plaintiff that Count V should be dismissed with leave to amend. *Reply* at 10. Given that the opposing party here, Defendant, has provided its “written consent,” Fed. R. Civ. P. 15(a)(2), the Court will dismiss Count V without prejudice and allow Plaintiff the opportunity to file a complaint that amends the allegations with respect to Count V.

IV. Conclusion

For the reasons discussed above, the Court **GRANTS IN PART** and **DENIES IN PART** Defendant’s Motion to Dismiss. Having taken the well-pleaded facts as true and viewing those in the light most favorable to Plaintiff, the Court concludes Plaintiff has pleaded Counts I, II, and IV with facial plausibility as the “factual content . . . allows the court to draw the reasonable inference that the defendant is liable.” *Iqbal*, 556 U.S. at 678; *see also Twombly* 550 U.S. at 570. Because Plaintiff has sufficiently stated eligibility of claims of the '555 Patent, '739 Patent, and '825 Patent, the Court **DENIES** Defendant’s Motion to Dismiss with respect to Counts I, II, and IV.

To avoid any misunderstanding, the Court does not decide today that the underlying claims are patent eligible, but instead “only that there are plausible factual

allegations” that the claims are not directed to abstract ideas or do include inventive concepts. *Coop. Ent.*, 50 F.4th at 136. Because the parties agree Plaintiff has not sufficiently stated its claim of direct infringement of the ’075 Patent, the Court **GRANTS** Defendant’s Motion to Dismiss with respect to Count V. Plaintiff’s claim of direct infringement of the ’075 Patent is hereby **DISMISSED WITHOUT PREJUDICE AND WITH LEAVE TO AMEND**.

SO ORDERED.

Signed January 4th, 2023.

A handwritten signature in black ink, reading "Ed Kinkeade", written over a horizontal line.

ED KINKEADE
UNITED STATES DISTRICT JUDGE